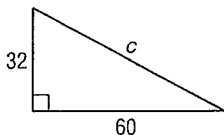


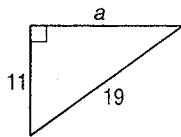
**10-4 Practice*****The Pythagorean Theorem***

Find the length of each missing side. If necessary, round to the nearest hundredth.

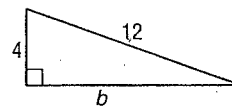
1.



2.



3.



If  $c$  is the measure of the hypotenuse of a right triangle, find each missing measure. If necessary, round to the nearest hundredth.

4.  $a = 24, b = 45, c = ?$

5.  $a = 28, b = 96, c = ?$

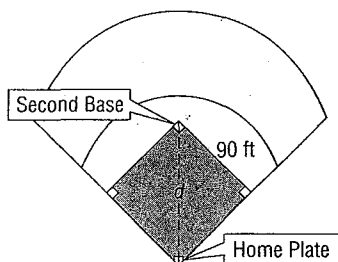
6.  $b = 48, c = 52, a = ?$

7.  $c = 27, a = 18, b = ?$

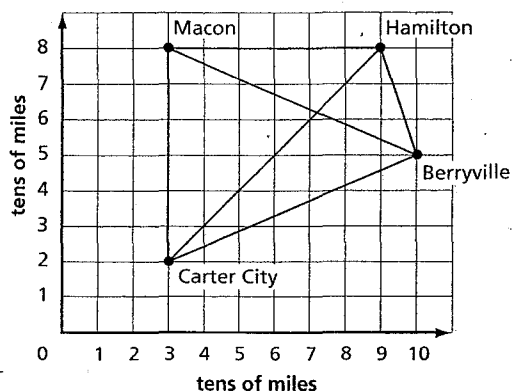
8.  $b = 14, c = 21, a = ?$

**10-4 Word Problem Practice*****Pythagorean Theorem***

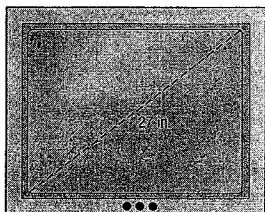
- 1. BASEBALL** A baseball diamond is a square. Each base path is 90 feet long. After a pitch, the catcher quickly throws the ball from home plate to a teammate standing by second base. Find the distance the ball travels. Round your answer to the nearest tenth.



- 3. MAPS** Find the distance between Hamilton and Carter City. Round your answer to the nearest tenth.



- 4. TELEVISION** Televisions are identified by the diagonal measurement of the viewing screen. For example, a 27-inch television has a diagonal screen measurement of 27 inches.



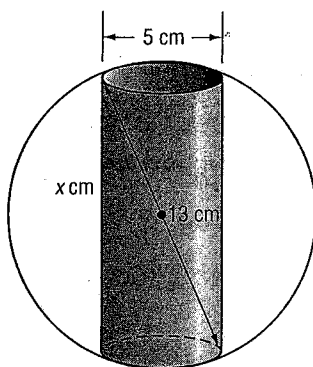
Complete the chart to find the screen height of each television given its size and screen width. Round your answers to the nearest whole number.

TV size	width (in.)	height (in.)
19-inch	15	
25-inch	21	
32-inch	25	
50-inch	40	

Source: measurements at Best Buy

**MANUFACTURING For Exercise 5**  
use the following information.

Karl works for a company that manufactures car parts. His job is to drill a hole in spherical steel balls. The balls and the holes have the dimensions shown on the diagram.



- 5.** How deep is the hole?